

REMARKS

Claims 1 - 27 are pending. Claims 1 – 21 and 25 - 27 have been amended. .
No new matter has been introduced. Reexamination and reconsideration of the application are respectfully requested.

In the October 1, 2002 Office Action, the Examiner rejected claims 1 - 4 and 13 - 16, 19, and 21 - 25 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,288,716 to Humpleman et al. (the Humpleman reference). The Examiner rejected claims 5 - 12, 17, 18, 26, and 27 under 35 U.S.C. § 103(a) as being obvious over the Humpleman reference in view of U.S. Patent No. 5,530,924 to Miller (the Miller reference.) The Examiner rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over the Humpleman reference. These rejections are respectfully traversed.

The present invention relates to an audio system having various kinds of capabilities of processing the audio with visual indication of the capabilities by labels. An audio system 1 connected, at external device connection terminals, to digital or analog signal sources such as a personal computer, a CD player, a Mini-Disk player, and a tape deck. In the audio system, the input selector is controlled by a central processing unit according to the operational state of an operation control device. The audio system is also provided with a display device, a read-only memory (ROM), and a random access memory. The display device has multi-purpose display blocks and indicators. The ROM stores control programs, e.g., the display sequence of the data to be displayed on the display device, and data necessary to control the audio system. The ROM data may include labels. The user can also enter a label as desired

character strings into a work area of the RAM. A PC connection terminal may be connected to the external PC.

The external PC allows the user to not only to control the operations such as selector switching on the system but also to execute character string registration into the edit area of the RAM as well as data rewriting. The display data to be stored in the RAM can be edited so that the contents to be displayed on the display device of the audio system can be changed by operating the operation control device. The audio system not only prepares default labels in the ROM as described above, but also allows the editing of the display data of the labels by the external PC. The edited display data may be stored in the RAM.

Claim 1 recites:

1. (Amended) An audio system having various kinds of capabilities of processing an audio signal with visual indication of the capabilities by labels, the audio system comprising:

a main section that provides the capabilities of processing the audio signal;

an editing section external to the main section that is operated to edit display data to provide edited display data representative of a label corresponding to a capability provided by the main section and to output the edited display data representative of the label corresponding to the capability;

a storage section that receives the edited display data and that stores the edited display data; and

a display section which is in a same device as the main section and the storage section, and is in a device separate from the editing section, that displays the label according to the edited display data stored in the storage section so that the displayed label can be customized in association with the corresponding capability.

The Humpleman reference relates to a browser-based home network utilizing Internet technology to control and command home devices that are connected to a home network. Each of the home devices may contain interface data, e.g., HTML, XML, JAVA, JAVASCRIPT, etc., that provides an interface for commanding and controlling of each of the home devices over the home network. Using the browser technology, the home network employs Internet standards to render the HTML pages in order to provide users with a plurality of graphical user interfaces (GUIs) for commanding and controlling each home device. In an embodiment, a 1394 serial bus may electronically connect multiple home devices. In other embodiments, the home network utilizes the IP network layer as the communication layer for the home network. *(Humpleman, Col. 4, lines 25 - 53.)*

The physical layer for data communication on the home network may be a 1394 serial bus, Ethernet, ATM, or wireless bus. In an embodiment, a home network 100 may include a DBSS 104 which receives transmission signals from a satellite; a digital video device DVD 108 to display digitally enclosed videos on a home television; a digital video cassette recorder DVCR 110, and a digital TV (DTV) 102. The DTV 102 may provide the human interface for the home network 100 by employing browser technology to allow users to control and command the home devices over the home

network 100. Unlike most other home devices that are typically connected to a home network, a DTV 102 may provide the human interface for the home network 100 as it includes a screen for displaying HTML pages. In other embodiments, a PC may provide the human interface for the home network because it embodies a screen display unit. (*Humpleman, Col. 5, line 50 - Col. 6, line 23.*)

A client-server relationship exists among the attached devices, with the DTV 102 behaving as the client and home devices DVCR 110, DVD 108, DSS 104 and a security system 120 behaving as servers. Each of the home devices is associated with one or more HTML files. These files define the command and control functions associated with a home device. The browser based DTV 102, acting as a client, receives and interprets the HTML files associated with the home devices, acting as servers, and graphically displays the respective control and command information on its viewable display. If the home devices conform to Internet HTML and HTTP standards, the home device may send its custom graphical user interface (GUI) to the browser based DTV. Because each home device 102 supplies its own GUI through the HTML files, the browser based DTV can provide a command and control interface for a home device without having the specific details about the device. (*Humpleman, col. 6, line 54 - Col. 7, line 7.*)

Each home device connected to the home network also contains a LOGO image file that contains an image that represents the manufacturer of the device. (*Col. 9, lines 39 - 42.*) An auto-tree builder uses the contents of a device list file of a home network to generate a device link page. A device link page is displayed to the user on the screen and contains a home device button for each home device identified in the device

list file. Each home device button is associated with the hypertext link to the top-level page of the respective home device. The user may define the arrangement of device images and logos on the device link page. (*Humpleman*, col. 13, line 15 - col. 14, line 16.)

The Humpleman reference does not disclose, teach, or suggest the audio system in claim 1, as amended. Unlike the audio system in claim 1, as amended, the Humpleman reference does not concern an audio system having various kinds of capabilities of processing an audio signal with visual indication of the capabilities by labels, the audio system including a main section that provides the capabilities of processing the audio signal; an editing section external to the main section that is operated to edit display data to provide edited display data representative of a label corresponding to a capability provided by the main section and to output the edited display data representative of the label corresponding to the capability; a storage section that receives the edited display data and that stores the edited display data; and **a display section, which is in a same device as the main section and the storage section, and is in a device separate from the editing section**, that displays the label according to the edited display data stored in the storage section so that the displayed label can be customized in association with the corresponding capability.

The Humpleman reference only discloses a browser-based home device, e.g., the digital TV (DTV) or other home device with a display, that resides on a home network and receives and interprets HTML files associated with other home devices on the network, and graphically displays the respective control and command information on **its** viewable display. A user can control the other home devices from the browser-

based DTV by selecting icons that have associated hyperlinks to start the control programs displayed on the display of the DTV. A configuration manager maintains a list of the home devices that are connected to the home network. The Humpleman reference also discloses that a device link page on the browser-based home device includes home device buttons corresponding to each home device, where when the user selects a button, the respective device's home page is also displayed.

(Humpleman, col. 6, line 54 - Col. 7, line 7; Col. 9, lines 39 - 42.)

This is not the same as an audio system having various kinds of capabilities of processing an audio signal with visual indication of the capabilities by labels, the audio system including a main section; an editing section external to the main section that is operated to edit display data representative of a label; a storage section that receives the edited display data and that stores the edited display data; and **a display section, which is in a same device as the main section and the storage section, and is in a device separate from the editing section**, that displays the label according to the edited display data stored in the storage section. In contrast, the Humpleman reference's browser-based home device allows the editing of device images and logos for other home devices along with the displaying of the edited device images and logos, but is not found to disclose that the other home devices include a display section to display the edited device images and logos, i.e., akin to the label, according to the edited display data. In other words, the editing section and the display section in the Humpleman reference are in the same physical device, and not separate devices as required by independent claim 1, as amended. Accordingly, applicants respectfully submit that independent claim 1, as amended, distinguishes over the Humpleman

reference.

The Miller reference does not make up for the deficiencies of the Humpleman reference. The Miller reference is directed to a system providing memory storage of a desired audio effect corresponding to each broadcast channel at a memory preset.

(Miller, col. 1, line 66 - col. 2, line 2.) A main controller 25, preferably including a programmed microprocessor, is connected to a radio bezel 26 including operator inputs 27 and an information display 28. Operator inputs 27 include memory presets and sound field selection buttons. Display 28 includes a display segment 32 for showing a tuned-in frequency. A display segment 33 shows the sound field simulation being invoked. Controller 25 receives signals from the operator inputs for selecting a broadcast station and the desired audio effects. Controller 25 is connected to RAM 37 which stores memory preset information. A memory row has designated RAM locations for storing a tuning frequency, a treble level, a bass level, and a sound field that corresponds to a memory preset button. *(Miller, col. 3, line 21 - col. 3, line 57.)*

An operator tunes to a desired broadcast station and adjusts the treble and bass levels to suit the operator's test using an adjustment rocker and function selection button. The operator may set a sound field simulation and then depress the memory preset button for a length of time to store the station and the selected audio effects. During later operation, when a preset button is depressed, the frequency stored is first recalled along with the treble, bass, and sound field parameters. *(Miller, col. 3, line 58 - col. 4, line 10.)*

The Miller reference does not disclose, teach, or suggest the audio of system of independent claim 1, as amended. The Examiner utilizes the Miller reference to show a

radio receiver having stored radio station memory presets that stores audio effects associated with stored radio presets and that the Miller system provides memory storage of a desired audio effect corresponding to each broadcast channel corresponding to a memory preset. In addition, the Examiner utilizes Miller to show an audio system having a radio tuner selectable tunable to a plurality of broadcast channels and having capabilities of inputting an audio signal from different types of signal sources. (*August 12 Office Action, pages 9 - 10*).

Assuming that the Miller reference does disclose what the Examiner states that it does, the Miller reference still does not disclose, teach, or suggest an audio system including a main section that provides the capabilities of processing the audio signal; an editing section external to the main section that is operated to edit display data representative of a label corresponding to a capability provided by the main section and to output the display data representative of the label corresponding to the capability; a storage section that receives the edited display data and that stores the edited display data; and a **display section, which is in a same device as the main section and the storage section, and in a device separate from the editing section**, that displays the label according to the edited display data stored in the storage section so that the displayed label can be customized in association with the corresponding capability. The Miller reference is not found to disclose an editing section that is in a separate device from the display section. If the Miller reference includes an editing section, i.e., for changing the preset audio effects, it is in the same device as the display section. The Miller reference is also not found to disclose that the display section displays the label that has been customized in association with the corresponding capability.

Accordingly, applicants respectfully submit that independent claim 1, as amended, distinguishes over the Miller reference, alone or in combination with the Humpleman reference.

Independent claims 2, 3, 5, 6, 7, 8, 13, and 14, all as amended, recite limitations similar to independent claim 1, as amended. Accordingly, applicants respectfully submit that independent claims 2, 3, 5, 6, 7, 8, 13, and 14, all as amended, distinguish over the Humpleman and the Miller references for the reasons set forth above with respect to independent claim 1, as amended.

Claims 9 - 12, and 15 - 18 depend, directly or indirectly, from independent claims 8 and 14, respectively. Accordingly, applicants respectfully submit that dependent claims 9 - 12 and 15 - 18 distinguish over the Humpleman and Miller references for the reasons set forth above with respect to independent claim 1, as amended.

Claim 4, as amended, recites:

An audio system capable of processing an audio signal inputted from different types of signal sources with visual indication of the signal sources by labels, the audio system comprising:

a first storage section that provisionally stores display data representative of labels corresponding to the signal sources;

an editing section external to the first storage section that is operated to edit the display data to provide edited display data so that the labels can be customized in association with the different types of the signal sources;

a second storage section that stores the edited display data;

a selecting section that selects one type of the different types of the

signal sources to input the audio signal; and

a display section that displays a label corresponding to the selected one type of the signal sources according to the display data stored in either the first storage section or the second storage section, wherein the editing section is external to the selecting section and the display section,

wherein the selecting section, the display section, the first storage system, and the second storage system are located in a first apparatus and the first apparatus does not include the editing section, and the different types of signal sources are physically connected to the first apparatus through external device connection interfaces not including a radio frequency interface and separate from a personal computer connection terminal.

The Humpleman reference does not disclose, teach, or suggest the audio system of independent claim 4, as amended. The Humpleman reference discloses a home device which controls and commands other devices which are connected together via a home network. The home device in control includes a display section that allows the selection of one of the home devices, and the editing section. This is not the same as a **first apparatus including a selecting section, a display section, a first storage system, and a second storage system and not including the editing section** because the home device, i.e., first apparatus, in the Humpleman reference includes the editing section and the display section. Accordingly, applicants respectfully submit that claim 4, as amended, distinguishes over the Humpleman reference.

Independent claim 4 further distinguishes over the Humpleman reference. The

Humpleman reference does not concern an audio system capable of processing an audio signal inputted from different types of signal sources with visual indication of the signal sources by labels, wherein **the different types of signal sources are physically connected to the first apparatus through external device connection interfaces not including a radio frequency interface and separate from a personal computer connection terminal.**

In the Humpleman reference, all of the home devices reside on a home network and are connected together network connections through a physical medium that allows the communication of a network protocol, such as IEEE-1394 or Ethernet. The Humpleman reference is not found to disclose that **different types of signal sources are physically connected to a home device through external device connection interfaces** because the home devices connect to each other via a network connection. Further, a separate personal computer connection terminal is not disclosed in the Humpleman reference because the home device in control communicates with the other home devices through a network connection. Accordingly, applicants respectfully submit that claim 4, as amended, further distinguishes over the Humpleman reference.

The Miller reference does not make up for the deficiencies of the Humpleman reference. The Miller reference does not concern an audio system capable of processing an audio signal inputted from different types of signal sources with visual indication of the signal sources by labels, wherein **the different types of signal sources are physically connected to the first apparatus through external device connection interfaces not including a radio frequency interface and separate from a personal computer connection terminal.**

Instead, the Miller reference discloses a radio receiver that provides memory storage of a desired audio effect corresponding to each broadcast channel corresponding to a memory preset. (*Miller*, col. 1, line 66 - col. 2, line 68). The audio system includes a radio tuner selectably tunable to a plurality of broadcast channels wherein the audio system operator inputs include a plurality of memory presets for selecting a selected broadcast channel and at least one treatment selector for selecting the desired audio effect. (*Miller*, col. 2, lines 10 - 15).

This is not the same as a **first apparatus including a selecting section, a display section, a first storage system, and a second storage system and not including the editing section and the different types of signal sources are physically connected to the first apparatus through external device connection interfaces, not including a radio frequency interface for a tuner, and separate from a personal computer connection terminal**. It is not the same because the Miller reference is directed to a radio receiver (normally installed in an automobile) that does not have physical connections terminals to the different types of signal sources. The Miller radio receiver only includes an antenna to pick up broadcast signals and does not include additional physical connection terminals. Accordingly, applicants respectfully submit that claim 4, as amended, further distinguishes over the Miller reference, alone or in combination with the Humpleman reference.

Dependent claims 10 and 16 recite similar limitations to independent claim 4, as amended. Accordingly, applicants respectfully submit that dependent claims 10 and 16 further distinguish over the Humpleman and Miller references for similar reasons as discussed above in regard to independent claim 4, as amended.

Independent claim 19, as amended, recites:

An audio apparatus having various kinds of capabilities of processing an audio signal with visual indication of the capabilities by labels, the audio apparatus comprising:

an operation control device to set and select the various kinds of capabilities of processing the audio signal with visual indication of the capabilities by labels;

a first interface for connection with an external editing system to received edited display data from the external editing system;

a second interface, physically separate from the first interface, for connection with at least one audio signal source, the at least one audio signal source providing the audio signal and the at least one audio signal source not being a radio frequency broadcast

a storage section that stores the edited display data; and

a display section that displays the labels according to the edited display data stored in the storage section so that the displayed labels can be customized in association with the corresponding capability of the audio signal source.

The Humpleman reference does not disclose, teach, or suggest the audio apparatus in claim 19. Unlike the audio apparatus in claim 19, the Humpleman reference does not concern having various kinds of capabilities of processing an audio signal with visual indication of the capabilities by labels, the audio apparatus including a first interface for connection with an external editing system to received edited display

data from the external editing system; and a **second interface, physically separate from the first interface, for connection with at least one audio signal source, the at least one audio signal source providing the audio signal and the at least one audio signal source not being a radio frequency broadcast.**

Instead, the Humpleman reference discloses home devices, audio apparatus, such as a CD, a digital satellite system, a digital TV, a CD player, a digital video disk player, etc. which are connected to each other on a home network utilizing a network operating under a networking protocol, (e.g., a 1394 serial bus or an Ethernet network utilizing a HTTP/IP protocol). If the Examiner cites that the other home devices are the audio apparatus of claim 19, there is no disclosure of these other home devices including a **second interface, physically separate from the first interface, for connection with at least one external audio signal source, the audio signal source not being a radio frequency broadcast,** and the at least one audio signal source providing the audio signal. In fact, because the browser-based home device controls the operation of the other home devices on the home network, the other home devices are the external audio signal sources for the browser-based home device. The browser-based home device only has only one interface, its network interface, to connect to the other home devices.

If the Examiner cites that the browser-based home device is the audio apparatus of claim 19, the browser-based home device would not include a **first interface for connection with an external editing system to receive edited display data so that the labels can be customized in association with the types of signal sources.** The browser-based home device of the Humpleman reference would not need a first

interface because it includes the editing system and thus would not need to receive edited display data so that the labels could be customized. Accordingly, no matter which device the Examiner might cite as the audio apparatus of claim 19, as amended, the applicants respectfully submit that claim 19, as amended, further distinguishes over the Humpleman reference.

The Miller reference does not make up for the deficiencies of the Humpleman reference. The Miller reference does not concern an audio apparatus including **a first interface for connection with an external editing system to received edited display data from the external editing system; and a second interface, physically separate from the first interface, for connection with at least one audio signal source, the at least one audio signal source providing the audio signal and the at least one audio signal source not being a radio frequency broadcast.**

Instead, the Miller reference discloses a radio receiver including an antenna, i.e., an interface, for receiving signals from a plurality of broadcast stations. This is not the same as a **first interface to receive edited display data from the external editing system** because the Miller reference is not found to disclose an external editing system or a physical interface to the external editing system. The disclosure of the Miller reference is also not the same as a **second interface to connect to at least one signal source where the at least one audio signal is not a radio frequency broadcast** because the only interface disclosed for the Miller reference is a radio frequency antenna to receive a radio frequency broadcast. Accordingly, applicants respectfully submit that independent claim 19, as amended, further distinguishes over the Miller reference, alone or in combination, with the Humpleman reference.

Independent claims 25 – 27, all as amended, recite similar limitations to independent claim 19, as amended. Accordingly, applicants respectfully submit that independent claims 25 - 27, all as amended, further distinguish over the Humpleman and Miller references, alone or in combination, for similar reasons as discussed above in regard to independent claim 19.

Claims 20 - 24 depend, directly or indirectly, from independent claim 19. Accordingly, applicants respectfully submit that claims 20 - 24 distinguish over the Humpleman and Miller references, alone or in combination, for the reasons set forth above with respect to independent claim 19.

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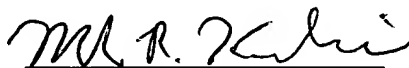
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Applicants believe that the foregoing amendments place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call either of the undersigned attorneys at the Los Angeles telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

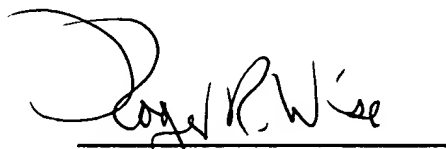
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